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| FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------|--|--|--|
| 11/14/2003 | Seiji Miura | XA-9536D | 9044 |
| 590 09/12/2005 | | EXAMINER | |
| OCKBRIDGE PC | | SONG, JA | SMINE |
| LE DRIVE | | | |
| | · | ART UNIT | PAPER NUMBER |
| A 22102-3833 | | 2188 | |
| | 11/14/2003 590 09/12/2005 OCKBRIDGE PC LE DRIVE | 11/14/2003 Seiji Miura 590 09/12/2005 OCKBRIDGE PC LE DRIVE | 11/14/2003 Seiji Miura XA-9536D 590 09/12/2005 EXAM OCKBRIDGE PC SONG, 1/4 LE DRIVE ART UNIT |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|---|--|---|--|--|--|
| Office Action Commons | 10/712,050 | MIURA ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Jasmine Song | 2188 | | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE | I. lely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1)⊠ Responsive to communication(s) filed on 14 N | lovember 2003 | | | | |
| | | | | | |
| | , - | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| diosed in accordance with the practice under a | Expanto Quayio, 1000 C.B. 11, 40 | 0.0.2.0. | | | |
| Disposition of Claims | | | | | |
| 4) Claim(s) <u>21-27</u> is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) 21 and 22 is/are rejected. | | | | | |
| 7) Claim(s) 23-27 is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/o | or election requirement. | | | | |
| Application Papers | · | | | | |
| | · | | | | |
| 9) The specification is objected to by the Examine | | | | | |
| 10)⊠ The drawing(s) filed on <u>14 November 2003</u> is/are: a)⊠ accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No. 09/931,860. | | | | | |
| Copies of the certified copies of the prio | rity documents have been receive | ed in this National Stage | | | |
| application from the International Burea | u (PCT Rule 17.2(a)). | | | | |
| * See the attached detailed Office action for a list | of the certified copies not receive | d. | | | |
| | | | | | |
| | | | | | |
| Attacher ant/a) | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO 442) | | | |
| 1) \(\sqrt{1}\) Notice of References Cited (PTO-892) 2) \(\sqrt{1}\) Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4) 🔝 Interview Summary Paper No(s)/Mail Da | | | | |
| 3) 🖾 Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) D Notice of Informal P | atent Application (PTO-152) | | | |
| Paper No(s)/Mail Date <u>11/14/2003</u> . 6) Other: | | | | | |

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Detailed Action

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. The drawings filed on 11/14/2003 have been approved by the Examiner.

Oath/Declaration

3. The applicant's oath/declaration has been reviewed by the examiner and is found to conform to the requirements prescribed in 37 C.F.R. 1.63.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 11/14/2003 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

5. Claim 22 is objected to because of the following informalities:

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In claim 22, lines 2, "read acc ss" should be changed to – read access --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 7. Claims 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato., US 6542969 B1.

Regarding claim 22, Sato teaches that a semiconductor device comprising:

A memory controller (Fig.4, memory controller 3) receiving commands from a CPU (Fig.4 and Fig.3, step S3), and controlling a memory (Fig.4, main memory 4) including a plurality of memory banks (Fig.10 and col.10, lines 6-14), wherein said memory controller has a first mode (active mode) and a second mode (idle mode) (col.3, lines 50-53), wherein each of said plurality of memory banks comprises a plurality of word lines, data lines, and memory cells (Fig.1, col.1, lines 26-30), wherein said memory is controlled to precharge after a read access in said first mode (col.9, lines 34-36), wherein said memory is controlled to receive next access command without precharge operation after a read access in said second mode (col.8, lines 19-

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27,44-55 and col.12, lines 26-33), wherein when a refresh command is received by said memory controller, said memory controller precharge said plurality of memory cells of said plurality of memory banks before refreshing said plurality of memory cells (Fig.3, steps S9-S11).

Regarding claim 23, Sato teaches that a successive read access after refresh command is operated without a precharge operation (Fig.6, step S8 to S11 to S2 to S4)

Allowable Subject Matter

8. Claims 23-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Schumann et al

US 5889714

10. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111 (c).

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11. When responding to the office action, Applicants are advised to provide the

examiner with the line numbers and page numbers in the application and/or references

cited to assist examiner to locate the appropriate paragraphs.

12. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jasmine Song whose telephone number is 571-272-

4213. The examiner can normally be reached on 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mano Padmanabhan can be reached on 571-272-4210. The fax phone

numbers for the organization where this application or proceeding is assigned are 571-

273-8300.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

Jaśmine Song

TOR

Mano Padmanabhan

Patent Examiner

Supervisory Patent Examiner

September 6, 2005

Technology Center 2100

GARY PORTKA
PRIMARY EXAMINER

Sang Forther